

[bituminous composition comprising a polymeric] continuous phase modifier that enhances the dimensional stability of said [bituminous composition] insulating layer at the operating temperatures and loads imposed by the pipeline.

4 22. (once amended) The pipeline of claim 21 wherein bituminous compositions are the main contributors to the thermal resistance to heat transfer between said pipe and the environment.

23. (once amended) The pipeline of claim 21, wherein said insulating layer is more than about 3/4 inch thick.

6 24. (once amended) The pipeline of claim [21] 52, wherein said polymeric modifier forms a network of continuous phases, wherein bitumen is one of said continuous phases.

7 25. (once amended) The pipeline of claim [21] 52, wherein said polymeric modifier[s] comprises polyolefin polymer[s].

8 26. (once amended) The pipeline of claim [21] 52, wherein said polymeric modifier[s] comprises atactic polypropylene.

9 27. (once amended) The pipeline of claim [21] 52, wherein said polymeric modifier[s] comprises a combination isotactic and atactic polypropylene.

10 28. (once amended) The pipeline of claim [21] 52, wherein said polymeric modifier [composition] comprises styrene block co-polymers.

11 29. (once amended) The pipeline of claim [21] 52, wherein said polymeric modifier comprises ethylene vinyl acetate.

12 30. (once amended) The pipeline of claim [21] 52, wherein said polymeric modifier comprises chloroprene.

13 31. (once amended) The pipeline of claim 21, wherein said modifier comprise[d]s at least one epoxy [or epoxides].

14 32. (once amended) The pipeline of claim 21, wherein said modifier [A pipeline comprising pipe with an insulating conglomerate therearound, wherein said conglomerate comprises a bituminous composition that comprises a modifier that] chemically reacts with the

bitumen to enhance its dimensional stability at the operating temperature and loads imposed by the pipeline.

15/33. (once amended) The pipeline of claim 32¹⁴, wherein [said] bituminous compositions are [is] the main contributor to the thermal resistance [of] between said pipe[line] and the environment.

16/34. (once amended) A pipeline as in claim 33¹⁵, further comprising pipe with an insulating conglomerate therearound, wherein said conglomerate comprises a bituminous composition, and wherein said pipeline comprises mechanical means for restraining] a connector which restrains said pipe from sinking through said composition[.].

17/35. The pipeline of claim 34¹⁶ wherein bituminous compositions are the main contributor to the thermal resistance to heat transfer between said pipe and the environment.

18/36. (once amended) The pipeline of claim 34¹⁷ wherein said [mechanical means] connector comprises [is] a connection between said pipe and a cool stratum of a bituminous composition.

19/37. (once amended) The pipeline of claim 34¹⁸, wherein said [mechanical connection] connector comprises at least one of a plurality of insulating layers at least 3 mm thick.

20/38. (once amended) The pipeline of claim 37¹⁹, wherein one layer of said plurality of insulating layers comprises a porous insulating material.

21/39. (once amended) [A] The pipeline of claim 38²⁰, wherein said pipeline comprises a group of pipes that are generally parallel to each other, [comprising] wherein at least one pipe[line] of said group is inside a sleeve [with] and said [a] bituminous composition is in a [the] space between said at least one pipe[line] and said sleeve.

22/40. (once amended) The pipeline [group] of claim 39²¹, wherein said sleeve is held in a fixed position relative to said [pipelines] group of pipes by a [mechanical connection] connector between said sleeve and said [pipelines] group of pipes.

23/41. (once amended) The pipeline [group] of claim 40²², wherein said [mechanical connection] connector comprises wood.

27/42. (once amended) The pipeline [group] of claim 39, wherein said sleeve comprises a cool stratum of a bituminous composition.

27/43. (once amended) The pipeline [group] of claim 39, wherein said bituminous composition in said space comprises particles of hard bitumen.

27/44. (once amended) The pipeline of claim 43, wherein said bituminous composition in said space comprises oil or liquid hydrocarbons solidified to a bituminous tar.

27/45. (once amended) The pipeline of claim 43, wherein said bituminous composition in said space comprises water.

27/46. (once amended) The pipeline of claim 39, wherein said bituminous composition in said space comprises a solidified mixture of Portland cement, asphalt, surfactants and water.

27/47. (once amended) The [A] pipeline of claim 53, [comprising pipe with a bituminous composition therearound] wherein said bituminous composition is formulated so that the pipe will sink through said composition to a eccentric position in service when the pipeline has reached its operating temperature.

30/48. (once amended) The pipeline of claim 53, further comprising a [A] plurality of generally parallel pipe[line]s surrounded by[,] and consolidated in [a] the waterproof insulating layer [conglomerate comprising a bituminous composition].

30/49. (once amended) The [A] pipeline of claim 48, wherein said plurality of pipes comprises [group comprising] at least one fluid carrier pipe and at least one heating element, wherein said plurality of pipes [group of pipes and heating element] is surrounded and insulated from the environment by a bituminous composition.

50. (once amended) A pipeline comprising;

[A)] a plurality of pipe sections joined at their ends and covered with insulation except near said joined ends, wherein said insulation comprises a non-bituminous insulating layer covered by [a] an outer layer comprising a bituminous composition.

[B)] a field-applied layer of a bituminous composition that covers and insulates the joined ends of said pipe and is fused to said outer [bituminous] layer, wherein [described in

A), thereby forming] a continuous bituminous outer layer along the length of said pipeline is formed.

51. (once amended) A pipeline made from flexible pipe comprising a plurality of layers wherein at least one of said layers comprises [a] an insulating layer of bituminous composition.

Please add the following claims: 2

3 ~~52~~. The pipeline of claim ~~21~~, wherein said modifier comprises a polymeric modifier.

11 ~~53~~. A pipeline comprising: a pipe and a waterproof insulating layer therearound, wherein said insulating layer comprises at least one bituminous composition, and wherein the resistance to heat transfer between said pipe and the environment that is contributed by said at least one bituminous composition is greater than the thermal resistance of a coating of a material with thermal conductivity of 0.12 BTU/hr•ft•°F and that is 1/2 inch thick and is adhered to said pipe.